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### Syracuse and its environs from c.6000 to 650 BC

**Citation for published version:**

Leighton, R 2020, 'Syracuse and its environs from c.6000 to 650 BC: The prehistoric and Greek origins of the city', *Journal of Greek Archaeology*, vol. 5, pp. 196-221. <https://doi.org/10.32028/9781789697926-5>

**Digital Object Identifier (DOI):**

[10.32028/9781789697926-5](https://doi.org/10.32028/9781789697926-5)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

Journal of Greek Archaeology

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Syracuse and its environs from c. 6000 to 650 BC:  
The prehistoric and Greek origins of the city.

Robert Leighton

*Abstract*

Scholars, as well as modern residents, might well agree with Cicero that Syracuse was ‘the richest and fairest’ of Greek cities in Sicily,<sup>1</sup> where its pre-eminence is well attested by historical and archaeological evidence. The nature and form of the settlements which preceded Greek colonization, however, are much harder to evaluate and have never been the subject of a unified analysis or synthesis. Sealed under buildings and layers accumulated throughout nearly 3000 years of urban development, the remains of prehistoric and early Greek Syracuse are largely invisible today, although they have been uncovered periodically by archaeologists over the last century or more. This article offers a chronologically extended view of the city’s origins, which situates the island promontory of Ortygia within a regional settlement network encompassing the natural bay area (or great harbour) and its hinterland. Starting in the Neolithic, but with the focus on later periods, I assess the initial expansion of Greek Syracuse with reference to pre-existing spatial relationships and cultural adaptations, which began to take shape during the Bronze and Iron Ages.

*Archaeological and topographical sources*

Research on ancient Syracuse could be said to have begun by 75 BC during the quaestorship of Cicero who explored the old Greek cemeteries in search of the tomb of Archimedes.<sup>2</sup> Some monuments of Syracusan antiquity have always been visible or renowned in literature, while others have come to light thanks to archaeological investigations, which multiplied in the wake of urban expansion and development after the mid-19th century.<sup>3</sup> With over 120,000 inhabitants, however, the densely populated modern city has restricted opportunities for excavation. The long history of occupation has also obscured and fragmented the remains of prehistoric phases, which tend to be overshadowed, at least in popular perception, by the emphasis which is always placed on the Greek ‘foundation’ of Syracuse in 733 BC, following the account of Thucydides (*Peloponnesian War*, VI.3.2).

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<sup>1</sup> Cicero, *Verrine Orations*, II.iv.52 (1967 ed.).

<sup>2</sup> Cicero, *Tusculan Disputations*, 5.64-65; Jaeger 2002.

<sup>3</sup> Zirone 2011.

Nevertheless, important prehistoric findings include those of Paolo Orsi around the highest point on the island of Ortygia (Piazza Duomo), where the Doric temple of Athena, erected c. 470 BC, survives as the city's cathedral and most famous landmark.<sup>4</sup> Ortygia was also at the heart of the earliest Greek *apoikia*.<sup>5</sup> In addition, we have evidence of occupation from numerous locations between the gulfs of Augusta and Noto (Figure 1). For later prehistory, rock-cut chamber tombs are key sources of information, even though the accompanying residential sites are often unidentified or unexcavated. The main difficulties stem from the uneven quality of the documentation, much of it derived from the early years of archaeological investigation, and from the incomplete publication of more recent work.

In the following pages, I attempt to compensate for some of these obstacles and gaps by piecing together the evidence from a variety of sources for settlement on Ortygia and at sites in the vicinity of the great harbour, which has been crucial to the fortunes of the area in most periods. Starting in the Neolithic (c. 6000 BC) and concluding with a fuller discussion of the Iron Age and the earliest Greek settlement, I focus mainly on the following topics: a) continuity and change in settlement locations; b) the form, extent and territorial relations of the last pre-Greek (Final Bronze to Iron Age) settlement on Ortygia; c) interaction between indigenous residents and the first Greek settlers; d) changes to the settlement layout as a result of Greek colonization; e) and the initial extension of Syracusan control over the adjacent territory in the late 8th century BC. Mindful of the traditional interest in a *histoire événementielle* of Greek colonization and relations with local people, my approach here inclines towards a Braudelian consideration of a longer time scale, or *longue durée*, as exemplified by patterns of human interaction with the landscape.

For the colonization phase, I follow the conventional chronology based on the Thucydidean account and take 734-733 BC as a starting point, albeit not precisely or scientifically verifiable, for the transformation of Syracuse into a western Greek city due to the arrival of Greek settlers. If a slightly different and possibly more extended chronology were adopted for this event, or process, an assessment of interaction between Greeks and indigenous people would need to be modified, although the sequence of development and many relevant issues should remain broadly the same.<sup>6</sup>

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<sup>4</sup> Orsi 1918.

<sup>5</sup> Literally 'home from home'.

<sup>6</sup> E.g. De Angelis 2016: 31, for references to alternative chronologies.

### *Topography and sources of evidence*

The geography of Syracuse and its environs has presented some similar opportunities and challenges to its inhabitants from the Neolithic to late antiquity. The frequent visibility of Mount Etna and even the coast of southern Calabria on unusually clear days has undoubtedly facilitated maritime travel, connectivity and inter-regional contacts in these periods. Modern research has identified marked changes, however, in the topography of the site over time. In particular, the hydrography and coastline have been altered by global sea level rise over millennia, and by quarrying and the construction of harbour quays and embankments since antiquity (Figure 2). Striking contrasts between ancient and modern Syracuse include: the formerly greater land surface of Ortygia; the reshaping of the ancient small harbour (the ‘Lakkios’) on its northeast side, which was bigger than the present-day ‘porto piccolo’; the probably reduced expanse of the great harbour; and once extensive coastal marshlands, not only around the Ciane and Anapo rivers but also within the area of the modern city just beyond Ortygia. The northern shore of Ortygia and adjacent mainland were probably linked by a causeway in the Archaic period, although the original configuration of the small harbour and its possible connection to the great harbour are the subject of debate.<sup>7</sup>

The greater surface area of ancient Ortygia, which is currently *c.* 60 hectares,<sup>8</sup> is also relevant to the configuration and evolution of the landscape. Pioneering work by G. Kapitän suggested that a now submerged ancient shoreline on the eastern side of the island was up to *c.* 150m further out to sea, implying that the island was *c.* 80 hectares in extent in the 8th century BC (Figure 2).<sup>9</sup> According to Mirisola and Polacco, however, it was considerably further out, at *c.* 5m below current sea level, which would result in an area of *c.* 117 hectares.<sup>10</sup> Of particular significance for prehistory is the recent identification of a late Pleistocene shoreline at 20-22m below sea level, which may have lasted until inundation around 9000 years ago, located up to about 500m northeast of Ortygia and up to around 800m beyond today’s coastline near Arenella (Figure 2).<sup>11</sup> The Neolithic and Bronze Age shores would have retreated subsequently towards the suggested 8th-century BC position as the

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<sup>7</sup> Mirisola 2010: 33-34; Basile 2012: 180-190 (with further references).

<sup>8</sup> Calculated manually using the 1:10000 Carta Tecnica Regionale sheet 646120 (2014 ed.).

<sup>9</sup> Kapitän 1967-1968: 178, fig. 3, which is frequently reproduced in archaeological publications.

<sup>10</sup> Mirisola and Polacco 1996: 16-17, tav. III.

<sup>11</sup> Scicchitano and Monaco 2006; Dutton, Scicchitano, Monaco, Desmarchelier, Antonioli, Lambeck, Esat, Fifield, McCulloch and Mortimer 2009. See also: Scicchitano, Castagnino Berlinghieri, Antonioli, Spampinato and Monaco 2017 (with further references).

island gradually shrank. Calculations of sea-level rise, terrestrial uplift, coastal erosion and general landscape evolution in this region are complex matters, however, while detailed palaeogeographic reconstructions in relation to a fine-grained archaeological timescale are hard to achieve. Ongoing research may allow further refinements.

More familiar features of the Pleistocene and early Holocene relief are the raised limestone plateaus and terraces, which characterize the Belvedere or ancient Epipoli heights (the Syracusan plateau) and their extension onto the headland of Santa Panagia-Lucia to the north, the island promontory of Ortygia, and the Maddalena peninsula (ancient Plemmyrion) to the south, which enclose the great harbour. Archaeological finds indicate that these areas attracted settlement in most periods, undoubtedly due in part to the presence of fresh water. Apart from the Ciane springs and the river Anapo, the older maps of Syracuse show numerous little stream valleys around the edges of Epipoli, where there were perhaps additional seeps, which are recurrent in the limestone landscape of the Hyblaeen hills.<sup>12</sup> Freshwater springs are more famously represented on the eastern side of Ortygia by the Arethusa and Schiavoni fountains.<sup>13</sup> Less well known are the labyrinthine subterranean passages and caverns beneath the prehistoric settlement and the ancient acropolis in Piazza Duomo, which have been frequently reused and modified since antiquity, as well as numerous coastal caves above and below the current shoreline, most notably around Panagia and Plemmyrion. Caves can also be sources of water, which may partly explain their recurrent usage in this region.<sup>14</sup>

#### *Neolithic to Copper Age occupation (c. 6000-2200 BC)*

Neolithic finds suggest that the coast of southeast Sicily offered a favourable venue for the settlement and subsistence preferences of early agriculturalists. Maritime resources and communications, wetlands rich in natural fauna, cultivable soils and small river valleys emanating from the limestone canyons ('cave') of the Hyblaeen hills, which are easily accessed for pasture and hunting, would present an attractive combination. Cattle, sheep, goat, pig and deer recur in local faunal samples from the Neolithic (c. 6000 to 3500 BC) to the Bronze Age.<sup>15</sup> Stentinello and Matrensa were evidently Neolithic 'ditched villages'

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<sup>12</sup> E.g. Cavallari and Cavallari 1883. Giompapa 2010: 42 (for the ancient 'Syraikos' stream, which once flowed southeastward into the small harbour).

<sup>13</sup> Giompapa 2010: 43; Luzzini 2015.

<sup>14</sup> Cultrera 2014: 205.

<sup>15</sup> Villari 1995.

comparable with those of coastal Apulia (Figure 2).<sup>16</sup> Harder to evaluate but nonetheless indicative of various settlement locations are the sparse Neolithic finds from Panagia, Tor di Conte, Ortygia, Plemmyrion, Terrauzza-Giaracà, Arenella and Ognina.<sup>17</sup> Their distribution was undoubtedly influenced by the proximity of fresh water, as suggested by streams in the vicinity of Stentinello, Panagia and Ognina. Several caves also contain Neolithic material.<sup>18</sup> While some sites have suffered from, but survived, coastal erosion, such as Stentinello and Ognina, others will have been lost or submerged by sea-level rise.

Apart from finds in caves (e.g. Ballarella, Picci 1, Chiusazza, Conzo and Palombara), many of which suggest ritual functions, evidence for Copper Age occupation (*c.* 3500-2200 BC) is scant (Figures 1-2).<sup>19</sup> While casually accrued settlement data are often difficult to interpret, our limited evidence could be due to a contraction of the local population, a preference for smaller sites, or a spread onto higher ground set back from the coastal plain, anticipating a pattern which is more characteristic of the Early Bronze Age throughout southern Sicily. From this perspective, the location of Ballarella and Picci 1 on the edge of the Epipoli plateau, which is occupied in all subsequent periods, is unsurprising.

We have limited information about environmental conditions around the bay, which may have been smaller during the Neolithic due to lower sea level. A borehole near the Ciane estuary indicates a lagoon environment by the later third millennium BC, isolated from the open sea by a sand barrier.<sup>20</sup> The wider distribution of Neolithic and Copper Age sites along the southeast coast of Sicily, however, suggests that the great harbour was not yet the feature of particular strategic interest to local communities that it would become in subsequent periods.

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<sup>16</sup> E.g.: Lena, Basile and Di Stefano 1988: 8; Scicchitano, Castagnino Berlinghieri, Antonioli, Spampinato and Monaco 2017; Leighton 1999: 66-70 (with further references).

<sup>17</sup> Panagia: Lazzarini, La Rosa and Cappellani 1965: 141; Lena, Basile and Di Stefano 1988: 26; Guzzardi 1993-1994: 1303. Fusco Tor di Conte: Basile 1993-1994: 1316-1317. Ortygia: Voza 1999: 10. Plemmyrion: Scalora 2017: 157. Terrauzza and Arenella: Lazzarini, La Rosa and Cappellani 1965: 141; Lena, Basile and Di Stefano 1988: 26-27. Ognina: Cultraro and Crispino 2014: 113.

<sup>18</sup> E.g. Picci, Conzo, Palombara, Grotta della Seggia, and others around Floridia and Canicattini: Odetti 2012; Crispino and Cultraro 2014; Cultrera 2014: 201-204.

<sup>19</sup> Tiné 1960-1961; 1965; Picone 1972-1973: 65-67; Odetti 2012; Crispino and Cultraro 2014; Cultrera 2014: 204-6.

<sup>20</sup> Spampinato, Costa, Di Stefano, Monaco and Scicchitano 2011: 224.

### *Early Bronze Age occupation (c. 2200-1550 BC)*

Early Bronze Age sites (c. 2200-1550 BC) are relatively numerous and readily identifiable from rock-cut chamber tombs (Figure 1). Several cemeteries comprising 30-50 tombs are located north of Syracuse beside river valleys 3-5km inland.<sup>21</sup> With good vantage points over the coastal plain, the Epipoli heights were probably also favoured at this time (Figure 2). Old records exist of prehistoric pottery, stone tools and chamber tombs at various locations around the plateau, often following the 40-50m contours, and extending eastward and southward into the modern town.<sup>22</sup> South of the city, Early Bronze Age tombs or finds come from Matrensa-Milocca, Cozzo Pantano and Plemmyrion, which have more plentiful Middle Bronze Age tombs, and Ognina.<sup>23</sup>

Painted (Castelluccio style) or plain Early Bronze Age pottery has been found at opposite ends of Ortygia near Castello Maniace and, possibly, the Temple of Apollo.<sup>24</sup> More substantial remains in Piazza Duomo include a large elliptical building (US369) founded on bedrock with nearby pits, deemed to be of cult or ritual use, and a deep well (US385).<sup>25</sup> While the painted pottery could date from the start of this period (c. 2300/2200 BC), the preponderance of plain wares (Messina Ricadi style) and a 14C date from the well of 1655-1585 cal.BC (1 $\sigma$ ) suggest more substantial occupation on the summit of Ortygia towards the end of the Early Bronze Age.<sup>26</sup> Some pottery from excavations in the former Via (now Piazza) Minerva, Via Consiglio Reginale and under the Ionic temple may also date to this phase, along with a curvilinear hut beneath the Athenaion excavated by Orsi.<sup>27</sup>

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<sup>21</sup> Veca 2017.

<sup>22</sup> E.g. Portella del Fusco: Cavallari and Holm 1883: 332, 337; Cavallari and Cavallari 1883: tav. IV: 76; Orsi 1889a. Podere Reale: Orsi 1889b; Veca 2017: 237. Sinerchia: Voza 1993-1994: 1292; Musumeci 1993-1994: 1353-1355. Via Bulgaria, Ginnasio Romano, Via Carabelli, Muro di Gelone, Villa Reimann, Balza Acradina, caves of Scala Greca, Sinerchia and Mazzarrona: Guzzardi 2017: 7.

<sup>23</sup> Matrensa-Milocca and Cozzo Pantano: Tanasi and Trapani 2019: 122-123. Cozzo Pantano t.16 also looks potentially early due to its distinctive form, large number of skeletons and stone tools. Plemmyrion: Scalora 2017: 97-98, 100. Ognina: Bernabò Brea 1966; Cultraro and Crispino 2014; Scicchitano, Castagnino Berlinghieri, Antonioli, Spampinato and Monaco 2017: 239.

<sup>24</sup> Guzzardi 2017: 7.

<sup>25</sup> Voza 1993-1994: 1286; 1999: 10; Crispino 1999: 21; Guzzardi 2012: 163; 2017, 6.

<sup>26</sup> Crispino and Chilardi 2018.

<sup>27</sup> Orsi 1918: 501-502; Pelagatti 1982a: 127; Guzzardi 2012: 163; Crispino and Chilardi 2018: 381.

Two prehistoric chamber tombs lacking their original contents, which were doubtless part of a larger necropolis, were located near the Arethusa spring.<sup>28</sup> Frasca has suggested a Middle Bronze Age date for one of them, which Crispino assigns to the Early Bronze Age. The earlier date seems more likely since tombs of this type at Castelluccio have some similar features, possibly contemporaneous with the later Messina Ricadi phase (above) identified by Crispino.<sup>29</sup>

To sum up, despite the absence of well-preserved houses, one may hypothesize that an Early Bronze Age residential zone extended from at least the Via Consiglio Reginale into Piazza Duomo and that a burial ground occupied an area of steeper slopes and natural springs on its western side.<sup>30</sup> The latter would be consistent with the typically perimetrical distribution and topographical associations of Bronze Age cemeteries.<sup>31</sup> A group of people probably also resided around the southern end of Ortygia. The construction of the well, which differs little from those of the early Greek city, may suggest that additional measures were taken in order to facilitate permanent residence for a larger population. Their choice of location on an elevated coastal promontory is recurrent in Sicily and its satellite islands in this period. Continuous or renewed occupation at long favoured localities around the bay between at least the later phase of the Early Bronze and the Middle Bronze Ages (probably *c.* 1750-1500 BC) suggests that the great harbour was now the hub for a network of settlements. Bone samples from Bronze Age contexts on Ortygia comprise cattle, sheep or goat, pig and deer, animals which were doubtless reared or obtained in part from the neighbouring mainland.<sup>32</sup> Maritime voyaging, which was already facilitating long-distance connections between Sicily, Malta, south Italy and Greece during the Early Bronze Age,<sup>33</sup> would also enhance the status of the Syracusan bay area in subsequent periods.

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<sup>28</sup> Orsi 1905: 381-383; Frasca 2015a: 20; Crispino and Chilardi 2018: 380.

<sup>29</sup> See, for example, tombs with lateral spaces cut into the rock: Orsi 1892: tav. I: 1a, 6a. However, their date range is uncertain. An unpublished tomb from Thapsos with a broadly similar feature is known to this author.

<sup>30</sup> For an 18th-century view of the Arethusa spring and cavern against the cliff: Houel 1785: pl. CXCIII.

<sup>31</sup> E.g. Leighton in press a.

<sup>32</sup> E.g. Orsi 1918: 519-521; Crispino and Chilardi 2018: 378-379.

<sup>33</sup> E.g. Cazzella and Recchia 2013.



### *Middle Bronze Age occupation (c. 1550-1250 BC)*

Thapsos stands out amongst the Middle Bronze Age settlements of eastern Sicily thanks to its large size, numerous buildings and tombs in which Mycenaean pottery and other imported items bear witness to maritime trade.<sup>34</sup> The greatest concentration of sites is around Syracuse, however, where imported goods also betray their trading connections, which are a conspicuous feature of this period. They mostly occupy the same rocky elevations and promontories as in the previous period, including Ortygia, encircling the great harbour like Plato's 'frogs round a pond' (Figures 1 and 2).<sup>35</sup> At about 6 x 3.5km today, this bay offers the best anchorage in eastern Sicily. The inhabitants of Plemmyrion and Ortygia were especially well placed to control its entrance, which is now 1km wide. The short sea crossing between them also avoids the long route overland of c. 8km.

The main findspots (Figure 2) comprise: a) a chamber tomb, probably of this period, near the Picci cave; b) a possible village at Santa Panagia; c) a series of postholes on the southern side of Epipoli near the Latomia del Paradiso, linked by Voza with rock-cut chamber tombs in the vicinity, one of which, near the altar of Hieron, contained Mycenaean (LH IIIA) pottery; d) pottery from the Grotta Sinerchia; e) tombs around the low plateau of Cozzo Pantano near the Ciane springs; f) the Matrensa-Milocca cemetery; g) several tomb groups, comprising c. 60 tombs, and remains of a settlement spread around the northern end of Plemmyrion; h) and Ognina.<sup>36</sup>

The original extent of Middle Bronze Age settlement on Ortygia is not easy to gauge. Some of the material from Orsi's prehistoric layer (his 'strato siculo') in the Via Minerva and Arcivescovado excavations probably belongs to this period, and possibly a quadrangular structure beneath the Ionic temple (Figure 3).<sup>37</sup> Middle-Late Bronze Age finds also come from various locations around Piazza Duomo and in the Via Consiglio Reginale.<sup>38</sup> A

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<sup>34</sup> van Wijngaarden 2002: 230-236; Tanasi 2015 (for Maltese connections).

<sup>35</sup> Plato, *Phaedo* 109b (1973 ed).

<sup>36</sup> Picci tomb: Picone 1972-1973: 67. Panagia: Guzzardi 1993-1994: 1303. Hieron tomb: Voza 1993-1994: 1288-1289. Grotta Sinerchia: Cultrera 2014: 209. C. Pantano and Matrensa-Milocca: Tanasi and Trapani 2019. Plemmyrion: Orsi 1891; 1899; Lena, Basile and Di Stefano 1988: 33-34; Guzzardi 1993-1994: 1300-1301; Genovese 2015: 116; Scalora 2017. Ognina: Bernabò Brea 1966: 68; Cultraro and Crispino 2014, 113. Perhaps also Predio Reale: Guzzardi 2017: 7.

<sup>37</sup> Orsi 1918: 407, 485, 501; Pelagatti 1976-1977: fig 5 ('capanna VI'); Guzzardi 2012: 151.

<sup>38</sup> Pelagatti 1978b: 132; 1982a: 127; Voza 1993-1994: 1286; 1999: 10-12; Crispino 1999: 21; Zirone 2011: 165; Guzzardi 2012: 163-164; 2017: 6. Via C. Reginale: Voza 1984-1985: 671.

residential quarter on this higher ground, as in earlier and later periods, is perhaps a more likely focal point of the settlement than one on the northern shoreline near the small harbour envisioned by Basile.<sup>39</sup> With reference to the topography of Ortygia as well as Thapsos, however, one might suppose that the residential zone also extended to the more sheltered western slopes flanking the great harbour near the Arethusa spring, while the more exposed eastern shore, where the impact of sea-level rise and coastal erosion is more obvious, would have been left open or perhaps used for burials. One could easily imagine tomb groups spread around the northern shoreline in a similar arrangement to those of Thapsos or Plemmyrion.

#### *Late Bronze and Early Iron Age occupation (c. 1250-733 BC)*

Some of the older Bronze Age sites around the harbour show continued occupation or reoccupation in the Late Bronze Age (c. 1250-950 BC) and Early Iron Age (c. 950-733 BC) (Figure 2). In several cases, the later inhabitants re-used former cemeteries and old tombs, perhaps for convenience or to assert a connection with their predecessors, a practice which is well attested in this region (see also below).<sup>40</sup> At Cozzo Pantano the evidence for this includes a violin-bow fibula of c. 1200 BC, wheel-made *piumata* (plumed) ware in several tombs, probably spanning the 10th to 8th centuries BC and Iron Age serpentine fibulae of about the 9th century BC.<sup>41</sup> Older tombs at Plemmyrion and perhaps Podere Reale on Epipoli also contained finds of later date, and there is a possible Iron Age tomb at Plemmyrion.<sup>42</sup> That the southern slopes of Epipoli (Neapolis area) were still used for burials at this time is indicated by two chamber tombs near Via Orsi: one held Early Iron Age inhumations, painted ware and various serpentine fibulae, typologically datable between the 10th and 8th centuries BC, suggesting that the tomb was in use for an extended period; another with an elliptical chamber and dromos lacked diagnostic finds but could be contemporary or slightly earlier.<sup>43</sup>

In a part of modern Syracuse identified with the ancient quarter of Acradina, scarcely 500m northwest of Ortygia, traces of a possible Iron Age habitation were noted in Via

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<sup>39</sup> Lena, Basile and Di Stefano 1988: 35. It is the case, however, that the northern shore of Plemmyrion hosted a residential zone: Scalora 2017: 45.

<sup>40</sup> E.g. Leighton in press a.

<sup>41</sup> Tanasi and Trapani 2019: 140-142; Veca 2019.

<sup>42</sup> Plemmyrion: Genovese 2015: 121; Scalora 2017: 98-99 (this could be a Final Bronze or Iron Age tomb). Podere Reale: Orsi 1889b: tav. VI: v.a-c, vi, tombs 8-9 could well belong to the Late Bronze Age, while the bucket vessel from tomb 3 resembles Final Bronze or Early Iron Age types (e.g. Turco 2000: 42, CS119.1).

<sup>43</sup> Voza 1973: 82, tav. XVIII; Gentili 1951: 296-297, fig. 29.

Bengasi (Figure 2).<sup>44</sup> Probable Iron Age finds come from near the railway station, at the base of a roadway that was used for several centuries from the early Greek period onwards, if not earlier, representing one of main connections between the Archaic city and chora.<sup>45</sup> Finds from Piazza Marconi could also belong to a pre-Greek settled area that extended in the direction of what was later known as the Via Elorina, linking Syracuse and Helorus (below).<sup>46</sup>

As in earlier periods, however, the richest deposits were found by Orsi on the summit of Ortygia (Via Minerva), which contained abundant domestic pottery, animal bones and hearths underneath layers labelled as ‘paleogreco’ or ‘greco arcaico’ (Figure 3). Although Orsi discarded large quantities of pottery from these contexts,<sup>47</sup> he repeatedly describes painted wheel-made plumed and geometric as well as coarse handmade pottery (Figure 4: g, k, l, m), which is consistent with a date just prior to, and probably contemporary with, the arrival of Greek settlers. A metal ingot also points to trade and perhaps local metal-working.<sup>48</sup> Subsequent excavations discovered more pottery of similar type, suggesting that the settlement had grown substantially by the Early Iron Age (below).<sup>49</sup> Records also exist of unspecified ‘ceramica sicula’ or ‘indigena’ from Piazza Archimede and San Giuseppe.<sup>50</sup>

The best published material is the small collection from Via Roma (Prefettura), which Frasca assigned to the Final Bronze Age (or Pantalica II phase, c. 1050/1000 to 850 BC).<sup>51</sup> Although we lack a refined chrono-typology for Iron Age domestic wares in this part of Sicily and it is not easy, therefore, to distinguish them from Final Bronze Age forms, an extended lower date into the Pantalica III phase (c. 850 to 733 BC) for the material in question is very likely in this author’s opinion.<sup>52</sup> Plumed ware was obviously characteristic of

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<sup>44</sup> Basile 2008-2009: 732-733, although the precise date is unclear.

<sup>45</sup> Basile 2008-2009: 749, 756, 758; 2012: 198. These include protohistoric impasto sherds and part of an arched fibula.

<sup>46</sup> Bernabò Brea 1947: 196, who identified the finds with Orsi’s period III (Iron Age).

<sup>47</sup> Orsi 1918: 429, 485.

<sup>48</sup> Orsi 1918: 463, fig. 60 (although this may be of earlier date).

<sup>49</sup> More specifically in Via Roma (Prefettura), Via Consiglio Regionale, Via Minerva, Piazza Duomo and the Montevergini convent: Pelagatti 1969: 143; 1978b: 132; Frasca 1983; Voza 1984-1985: 670; 1993-1994: 1282-1283; 1999: 10; Ciurcina 2000: 87; Basile 2008-2009: 775, 781; Guzzardi 2012: 163.

<sup>50</sup> Cultrera 1940: 203; Pelagatti 1978b: 126, fig. 5, 131-132.

<sup>51</sup> Frasca 1983.

<sup>52</sup> Were it not for the limitations of the contexts and publications, the best site for a definition of the Pantalica III (Early Iron Age) phase would be Syracuse, where we can see the greater variety of material from domestic, as opposed to funerary, contexts. Moreover, there is no evidence that a profound change in pottery styles occurred around 800 BC, shortly before the

the Iron Age and continued to be produced, albeit to a lesser extent, during the early colonial or Pantalica IV ('Finocchito') period (c. 733-650 BC). This is confirmed by its general ubiquity at Iron Age sites in southern Sicily, by the numerous contexts where it occurs directly below the earliest Greek layers at Syracuse, by its association with Greek imports in the early habitation levels of Naxos, and by analogies with the material from Iron Age contexts at Butera.<sup>53</sup> Indeed, the painted 'girandola' (Catherine wheel) and hatched triangular motifs (Figure 4: k-m), which Orsi repeatedly mentions, are probably most typical of the later part of the Early Iron Age (c. 800-733 BC in terms of the conventional chronology).

While the Final Bronze and Early Iron Ages (Bronzo Finale II to I Fe in Italian terminology) seem to be well represented, the evidence from Syracuse is less clear or abundant for the earlier part of the Late Bronze Age (Bronzo Recente/Finale I, or the Pantalica I phase) between about the 13th and 11th centuries BC. It remains to be clarified whether the local population contracted or shifted inland at this time. That the coastal zone of eastern Sicily was abandoned and still depopulated in the Iron Age is an old idea, which was always suspect, however, and hostage to fortune.<sup>54</sup> In fact, the number of sites and finds has grown over the years.<sup>55</sup> This is not to say that there was necessarily a diffuse pattern of Iron Age coastal occupation, but rather that the main sites, like those inland, were in strategically prominent and favourable locations, of which Cassibile and Ortygia are good examples. Nevertheless, given the relatively small population sizes of late prehistoric sites by comparison with those of classical antiquity, it is still reasonable to argue that there was a high proportion of cultivable land available to be occupied and worked along the coastal zone, perhaps superior to that of most of Greece, and that the settlers were aware of this before embarking for Sicily and other parts of southern Italy.<sup>56</sup>

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arrival of Greek settlers, and that we are therefore missing the last pre-Greek phase at Syracuse. It is more likely that we are dealing with a 'fase avanzata della cultura di Cassibile' as Voza 1993-1994: 1283, describes it. See also: Leighton 2019a (with further references).

<sup>53</sup> Lentini 2012a: 160; Adamesteanu 1958: 526. Also noteworthy are associations between plumed, incised and protoarchaic wares at Morgantina (Leighton 1993) and the presence of plumed jars or pithoi (similar to those found by Orsi in Syracuse) in the early Greek cemetery at Gela (Orsi 1906: tav. V, 174).

<sup>54</sup> Bernabò Brea 1957: 164; reiterated by Frasca 1983: 597; 2015a: 167; 2015b: 167.

<sup>55</sup> These include: Naxos (Procelli 1983: 79-81; Lentini 2012a; 2012b; 2016); Punta Castelluzzo (Bernabò Brea 1971); locations noted above around the great harbour (Epipoli-Neapolis, Cozzo Pantano, Plemmyrion); the major site of Cassibile (below); possibly Ognina (Cultraro and Crispino 2014: 113-114); even a few traces in Catania (Frasca 2010: 102-103; 2015b: 167, with further references) could be of relevant date.

<sup>56</sup> De Angelis 2000; 2010; 2016: 55.

*Form, extent and territory of the last pre-Greek settlement on Ortygia*

As a result of recurrent disturbance, and no doubt stone robbing and recycling, only small parts of a few Final Bronze to Iron Age buildings have been recognized on Ortygia (Figure 3: H1-4). A series of schematic plans and assumptions convey the impression that they comprised small circular huts. By contrast, I maintain they were more likely oval or elongated structures with curved ends, and sometimes quite large. Orsi thought that the Via Minerva building might have been circular, but his plan (Figure 4: n) and photograph do not bear this out.<sup>57</sup> Beyond its curved corner, the thick walls and bench evidently straighten so that it could well have been a large elongated dwelling. The remains in the Arcivescovado courtyard were too incomplete to permit certainty.<sup>58</sup> Likewise, to infer a roundhouse from the rubble of the Prefettura building seems questionable, especially since another probably protohistoric rectilinear wall with bench attached has come to light nearby (Figure 3: H4?).<sup>59</sup> Guzzardi noted possible quadrangular and round buildings in recent soundings under the Ionic temple, although poorly preserved and not closely dated.<sup>60</sup>

While Late Bronze Age roundhouses occur in western Sicily, at Mokarta for example, sizeable oval and quadrangular dwellings are more common in central-eastern areas.<sup>61</sup> Those on Lipari are variably elongated, often large, and with curved corners and benches, not unlike the longhouses of Morgantina. There are also oval or apsidal buildings at Naxos (below), which are contemporary with the first arrival of Greek settlers.<sup>62</sup> It would be surprising, therefore, if the Ortygia settlement consisted of small roundhouses.

The whereabouts of burial grounds are mostly unknown. The nearest Iron Age chamber tomb in Via Orsi is about 2km away and more likely served people living nearby, perhaps on the Epipoli slopes or plateau, as in previous periods (Figure 2). The presence of a cemetery on the edge of the Ortygia residential zone would not be surprising, as in the Early

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<sup>57</sup> Orsi 1918: 429-432, figs. 42-43, tav. II. Frasca 2015a: 19-20, suggests it was a Middle Bronze Age roundhouse, but the design and the proximity of plumed ware in Orsi's description is consistent with a Final Bronze-Early Iron Age date.

<sup>58</sup> Orsi 1918: 481-482.

<sup>59</sup> Frasca 1983: 569-573, figs. 2, 5. The better plan (though at a small scale) does not show a round building: Pelagatti 1982b: 123, fig. 5: O; Ciurcina 2000: 87, 89, fig. 1.

<sup>60</sup> Guzzardi 2012: 163.

<sup>61</sup> E.g. Sevara, Salisbury, Totschnig, Doneus, Löcker and Tusa, in press (Mokarta, western Sicily). Lipari: Bernabò Brea and Cavalier 1980. Thapsos: Voza 1980-1981: 677-679, tav. CXVI. Morgantina: Leighton 2012: 77, fig. 1.44.

<sup>62</sup> Lentini 2012a: 160; 2012b: 312.

Bronze Age (above), but the area is too altered to be informative. We cannot exclude the possibility, however speculative, that there were also jar burials of the types recorded on Lipari, at Madonna del Piano and Lentini at this time.<sup>63</sup>

Despite these uncertainties, one may hypothesize that the Iron Age site extended for at least 230m over the summit of Ortygia, which is the distance from the Montevergini convent to the Via Consiglio Reginale, or around 350m if we include the Piazza Archimede finds.<sup>64</sup> If it were of equal extent from East to West, it would have covered over 10 hectares. By comparison, for example, the Late Bronze Age settlement on the Lipari acropolis comprised about 3 hectares, while the Lentini Metapiccola houses consisted of a small cluster, although there were probably others in the vicinity.<sup>65</sup> Pantalica and Cassibile are hard to compare, since the main promontories are large (over 100 hectares) and surrounded by extensive burial grounds, but almost nothing is known about the residential quarters, which may have formed separate nuclei.<sup>66</sup> This may remind us that the definition of settlements and territories used in archaeological analysis may not correspond to the perceptions of the original inhabitants. In the case of Ortygia, the whole island, probably over 100 hectares at this time (above), could be considered the 'site', even if most of it was unbuilt on.

As in earlier periods, the smaller sites around the bay were likely interconnected and might have considered themselves part of the same community, perhaps under the aegis of Ortygia. In a period characterized by major settlements occupying topographically distinctive landforms and promontories, spaced at least 10km from each other, the prominence of Ortygia would have been reinforced by the absence of any major rival in the immediate vicinity.<sup>67</sup> The formerly substantial Middle Bronze Age settlement on Plemmyrion was evidently much reduced at this time and no longer on a par with Ortygia. The only large neighbour seems to have been Cassibile, 14km away, which was well placed to control an adjacent stretch of coastal plain between the bay of Fontane Bianche or perhaps Ognina to the north, and the Asinaro-Noto or perhaps the Tellaro estuary to the south (Figure 1).<sup>68</sup> Thapsos,

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<sup>63</sup> Bernabò Brea and Cavalier 1960; Bernabò Brea, Militello and La Piana 1969; Palermo 1982: 81-83.

<sup>64</sup> Pelagatti 1978b: 126, fig. 5. The latter require further verification however.

<sup>65</sup> Bernabò Brea and Cavalier 1980: 587; Frasca 2009: 27-32.

<sup>66</sup> Leighton 2016: 139-140; 2019a: 13.

<sup>67</sup> E.g. Leighton 2005.

<sup>68</sup> Leighton 2016.

which is 11km further north, may have retained a certain, albeit diminished, importance in the 11th-10th centuries BC, but has little evidence of the immediate pre-Greek period.<sup>69</sup>

Located on a spectacular promontory delimited by a river gorge in hilly country about 24km to the northwest (Figure 1), the site of Pantalica was associated by Bernabò Brea with the main centre of a hypothetical Sikel kingdom of Hybla, ruled by one Hyblon, who is mentioned by Thucydides (VI.4.1) in connection with the foundation of Megara Hyblaea.<sup>70</sup> Bernabò Brea thought of Ortygia as subordinate to Pantalica, which it served as a maritime outlet ('scalo marittimo').<sup>71</sup> It is debatable, however, whether Pantalica could have controlled Syracuse given the distance between them, even though they are linked by the Anapo river. Cassibile would have been better placed to do so. Alternatively, we may envisage multiple provincial centres, trading and competing with each other, but retaining autonomy. In such a scenario, Ortygia would represent at least a middle-ranking settlement, perhaps with a population in the low to mid hundreds.<sup>72</sup>

### *The arrival of the Greeks*

It is perhaps inevitable that the interpretation of archaeological remains associated with the first Greek settlers on Ortygia has been overshadowed by Thucydides' reference (VI.3.2) to the eviction 'from "the island" where the inner city is' (i.e. Ortygia) of the indigenous residents ('Sikels') by the new arrivals, led by Archias.<sup>73</sup> While this rather bald statement seems straightforward, it is noteworthy that Thucydides generally shows little interest in social relations between Greeks and non-Greeks and sometimes appears to give an abridged version of events. In the case of Lentini, he also comments that the locals were expelled by Greeks (VI.3.3), whereas Polyaeus (V.5.1) states that they lived together initially.<sup>74</sup> Moreover, while Thucydides calls the local people Sikels, we do not know what this term signified to the inhabitants of specific indigenous settlements. Their sense of identity – perhaps rather fluid or parochial – doubtless differed from that of an Athenian citizen living

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<sup>69</sup> The late occupation phase, however, may well overlap in part with the Early Iron Age: Voza 1980-1981: 679.

<sup>70</sup> Bernabò Brea 1968. However, Villasmundo is often regarded as a more likely alternative: e.g. Tréziny 2016: 167. For additional critique: Graham 1988: 314-315.

<sup>71</sup> Bernabò Brea 1957: 164; 1968: 166.

<sup>72</sup> For some preliminary estimates of population sizes in this period: Leighton 2012: 192; 2016: 140.

<sup>73</sup> Thucydides, *Peloponnesian War*, VI.3.2 (1980 ed).

<sup>74</sup> Albanese Procelli 2016: 203. See also Diodorus (5.6.5) for a different idea, based on integration, of relations between Sikels and Greeks: De Angelis 2010: 35-36.

three centuries later and concerned with a conflict between mighty city states. Wars typically heighten or polarize notions of identity and otherness. By contrast, a lack of any pre-determined or well established 'colonial policy' on the part of the first settlers and a correspondingly unpredictable and disunited response from local people would also fit with the initially variable relations, alliances, rivalries and hostilities between individual sites and splinter groups of immigrants, which can be gleaned from our literary sources.

Unfortunately, archaeological evidence cannot usually or easily illuminate the details of specific historical events and political relations. In a context of sustained physical proximity or cohabitation, material culture may not reflect or serve to identify any single or distinct ethnic group or individual in a straightforward way. Pottery, houses and tombs of different types, and perhaps even votive offerings, dress items and other cultural practices, might conceivably be adopted by people of diverse origin in such circumstances. It was already noted by Orsi that the distinction was not always clear-cut between what were often labelled as respectively Sikel or Greek contexts on Ortygia due to finds of mixed type. A reappraisal is hindered by incomplete publication of recent discoveries or old excavations that were not designed to cope with the poor preservation and complexities of urban archaeology, not to mention the old habit of discarding coarse wares.

In fairness, however, Orsi was aware of such problems and duly cautious in his analysis.<sup>75</sup> Ever sensitive to archaeological indications of how the indigenous settlement had come to an end, he could find no evidence of a destruction layer or violent transformation that might be ascribed to a conflict between locals and incomers.<sup>76</sup> He considered a phase of interaction and trade prior to Greek political domination to be possible and he recognized recurrent associations between early Greek pottery and Iron Age finds of native type, notably in certain ashy deposits of a ritual nature containing dress items: bronze *navicella* and serpentine fibulae, globular pendants, beads and chains (Figure 4: a-f), which are typical of indigenous, probably female, tombs at contemporary sites inland, such as Finocchito.<sup>77</sup> They also occur occasionally in the Fusco cemetery of Syracuse on the adjacent mainland, where they have generated discussion amongst scholars as to whether they are indicative of native

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<sup>75</sup> Orsi 1918: 375, 408, 518.

<sup>76</sup> Orsi 1918: 502: 'Il suo uniforme carattere di spesso banco nerastro e grasso, piuttosto che ad un grande generale e violento incendio, parmi si debba imputare alla decomposizione di sostanze organiche, cioè dei rifiuti dell'abitazione...'. This contradicts Copani 2005: 259.

<sup>77</sup> Orsi 1918: 395-398, 577-581. For Finocchito: Steures 1980; Frasca 1981.



women or mixed marriages.<sup>78</sup> In this regard, it is noteworthy that one of the first, albeit tentative, findings of genetic studies lends credibility to the hypothesis of mixed marriages insofar as Greek male settlers in eastern Sicily may have outnumbered females.<sup>79</sup>

While burials generally provide limited information about everyday activities, more recent excavations have found artefacts of local type mixed with early Greek pottery in several residential contexts. Few have been illustrated, however, which makes them difficult to evaluate, mindful of the possibility that earlier material may recur in later layers as residual intrusions, or that pottery may be obtained through trade. Nevertheless, we have local incised pottery, which typically imitates or adopts Greek painted motifs such as concentric circles, horizontal lines and panels,<sup>80</sup> as well as reports of plumed and geometric painted ware associated with Early Protocorinthian.<sup>81</sup> It would be useful to know more about the coarse wares ('impasto') found in several early contexts with Greek pottery and whether they can reveal anything about continuity or change in culinary practices.<sup>82</sup>

One object that might be taken as a token of hostility, but only speculatively, is the bronze spearhead of local type from beneath the Athenaion, likened by Orsi and others to a war trophy (Figure 4: j).<sup>83</sup> As a typologically late version of the form, however, not precisely datable within the 7th century BC, it may not be relevant to an initial phase of interaction. Another artefact of potential relevance to indigenous traditions or beliefs is the pottery horned animal head, perhaps a votive or theriomorph, which is reminiscent of late prehistoric

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<sup>78</sup> E.g. Albanese Procelli 2010: 504; Shepherd 2014; 2017a: 343-344; Saltini Semerari 2016; De Angelis 2016: 161-173.

<sup>79</sup> Tofanelli, Brisighelli, Anagnostou, Busby, Ferri, Thomas, Taglioli, Rudan, Zemunik, Hayward, Bolnick, Romano, Cali, Luiselli, Shepherd, Tusa, Facella and Capelli 2016. A recent study of the Taranto region, using different and perhaps more representative data, also suggests that relatively 'few Greek colonists settled in southern Italy and lived in small numbers alongside indigenous people in Greek colonies as well as in indigenous settlements' (Rathmann, Kyle, Nikita, Harvati and Saltini Semerari 2019: 528). For a metaphorical link between colonization and intermarriage: Dougherty 1993: 68.

<sup>80</sup> E.g. Pelagatti 1978b: 132, tav. XXXVI, 2 [Ionic temple zone]; 1982a: 138, tav. XXVIII, 10; Frasca 1983: 592, fig. 22, a-c [Via Roma]; Crispino 1999: 24-25, figs. 17-18 [from Piazza Duomo, assigned to the 9th-8th centuries BC (Pantalica III), but more likely to be late 8th – early 7th century BC (Pantalica IV) in this author's opinion]; Ancona 2009: 806, tav. LXXI,b.

<sup>81</sup> Voza 1984-1985: 670 (Via Consiglio Reginale). This need not be dismissed as anomalous or intrusive since it is also recorded at Naxos (see below).

<sup>82</sup> E.g. Bernabò Brea 1947: 196 [Piazza Marconi]; Basile 2008-2009: 732, 749, 755, 780 [Via Bengasi, Piazzale della Stazione and Via Roma]; Guzzardi 2012: 150, 157 [Ionic temple].

<sup>83</sup> Orsi 1918: 576-577, fig. 183; Snodgrass 1964: 128-129; Albanese Procelli 1993: 180; Shepherd 2017a: 343.

vessels with horned handles (Figure 4: i).<sup>84</sup> An old discovery in the Sclorosa cave on the northern shore of modern Syracuse also reported what may have been a votive deposit of indigenous bronze and iron rings and fibulae dating to the early years of Greek settlement.<sup>85</sup>

I would not go so far as to claim, therefore, that local products are ‘conspicuous by their absence at Greek sites’,<sup>86</sup> although their distribution may be uneven. The lower quantities at Megara Hyblaea, for example, could derive from its diminished attractiveness to local people as a new town on a greenfield site with no history of indigenous occupation (since the Neolithic), by contrast with the ancestral associations and topographical advantages of Syracuse. Moreover, local people might well become inconspicuous or even invisible archaeologically due to their willingness to use Greek pottery, which is hardly surprising given its good quality, easy availability and adaptability. It also presents certain analogies of form, decoration and function to local wares. In sum, we should heed the opinion of the former superintendent most closely involved in excavations over recent decades at Syracuse, when he suggests a:

‘periodo di convivenza durante il quale, e soprattutto attraverso il materiale ceramico, si percepiscono la continuità e la vitalità delle produzioni locali nel “momento” in cui compaiono negli strati contestualmente ai primi materiali di produzione greca’.<sup>87</sup>

Architectural forms and practices are often invoked in order to emphasize the radical nature of cultural changes brought about by Greek settlers. The structures in question, best exemplified by the Prefettura excavations, dated from around 700 BC or slightly earlier, consist of small quadrangular rooms, not unlike the houses of Greek settlers at Megara Hyblaea and elsewhere.<sup>88</sup> Flanked by linear trackways, the finds include mainly Late Geometric and Protocorinthian pottery and iron ingots in one building, suggesting an artisans’ quarter, although this characterization is debatable (below).<sup>89</sup>

While different in plan from pre-Greek buildings, however, several aspects of construction are similar. Wall foundations of unshaped stones, earthen or lime plaster floors, clay hearths, organic roofing material, and a lateral bench with cooking installations are

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<sup>84</sup> Orsi 1918: 516-518, fig. 108; Leighton 1993: 72 (with further references on prehistoric forms). A miniature axe from a probable votive context in the Prefettura excavations might also be of indigenous type: Basile 2008-2009: 780.

<sup>85</sup> Crispino and Cultraro 2014: 184.

<sup>86</sup> Shepherd 2013: 76.

<sup>87</sup> Voza 1999: 12.

<sup>88</sup> Pelagatti 1969: 143; 1978b: 127-130; 1982b: 119-134; Basile 2008-2009: 780; Guzzardi 2012: 151 (Ionic temple).

<sup>89</sup> Pelagatti 1973: 73; 1980-1981: 707; 1982b: 147; Guzzardi 2012: 151.

recurrent features of Sicilian Late Bronze-Iron Age houses, which could vary considerably in shape, but also include adjacent quadrangular rooms.<sup>90</sup> While not denying similarities with Greek 8th-century BC houses,<sup>91</sup> we may surmise that these structures, like the new water wells, would not have seemed strange or unfamiliar to local people.

It is possible, however, that the transition from pre-Greek house forms to these small quadrangular structures was more complex than currently indicated. In Via Consiglio Reginale, Voza found walls (L/S) post-dating a prehistoric layer and pre-dating 7th-century BC buildings and a trackway.<sup>92</sup> The layers associated with these early walls and with the foundation ('massicciata') for the trackway contained Iron Age plumed and geometric painted ware as well as Early Protocorinthian pottery of the late 8th century BC. This might reflect an intermediate phase in which Greek settlers had not yet transformed the urban layout by the imposition of quadrangular buildings and a new street plan.

Rather than Megara Hyblaea, which was free of earlier buildings, a better parallel for the sequence of development at Syracuse could be Naxos, where Greeks settled at about the same time. Excavations at Naxos have identified parts of elongated curvilinear buildings (g, d, f), which antedate the construction of the small quadrangular dwellings previously regarded as the houses of the first colonists. They have some similarities with local Iron Age forms, including post-holes set into the wall, although the excavator is more persuaded by parallels with Greek apsidal buildings.<sup>93</sup> Associated mainly with Greek Late Geometric pottery, but also containing indigenous plumed, geometric painted, incised and coarse ware, Lentini regards them as possible indicators of an early phase of cohabitation with local people.

Of course, the situation at Syracuse requires further clarification. Nevertheless, it is reasonable to suppose that there was a transitional phase in the process of Greek settlement prior to the implementation of more extensive building projects. This would overlap with the more insecure years of immigration implied by the literary sources, well exemplified locally by the peregrinations of Megarian settlers from Trotilon to Thapsos via Leontini prior to settling at Megara (Thucydides VI.4.1), where Tréziny infers a preliminary 'phase des

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<sup>90</sup> E.g. Voza 1980-1981: 677 (Thapsos phase III); Leighton 2012: 64-74.

<sup>91</sup> Pelagatti 1982b: 129; Coldstream 1977: 308.

<sup>92</sup> Voza 1984-1985: 670-671.

<sup>93</sup> Lentini 2012a; 2012b; 2016.

campements'.<sup>94</sup> This also points to more extended processes of colonization and consolidation than are conveyed by single foundation dates.<sup>95</sup>

Various reasons might be suggested or suspected for the removal of indigenous inhabitants mentioned (above) by Thucydides. Separation according to ethnic or class differences come to mind, but it might equally have stemmed from the growing ambitions of political leaders, which envisioned the high ground of Ortygia as an essentially ceremonial centre of a future metropolis. This would be consistent with the numerous religious or ritual installations found in recent years, most notably the late 8th-century BC tempietto, located next to the future Ionic and Doric temples (Figure 3: oikos), as well as the pits and altars in the same places as the former indigenous houses in Via Roma, Via Minerva, Piazza Duomo and the Montevergini convent.<sup>96</sup> It has been suggested that the quadrangular rooms under the Ionic temple were not the modest dwellings of new settlers, but more likely had cult uses, like some of the Prefettura buildings.<sup>97</sup> The primary concern, therefore, may have been with functional changes and urban zoning, involving the separation of residential from public areas, rather than simply evicting locals in order to replace them with immigrants.

Even if they were dispossessed in a hostile and discriminatory manner, moreover, the former residents may not have been expelled from the entire urban area or the wider catchment of the great harbour. Thucydides refers explicitly to their removal from the island of the inner city. In response to population growth and the need for new symbolic and ritual structures for the emerging city state, the dominant idea could have been to limit residential space on the acropolis, and divert any more settlers or burgeoning families to peripheral zones or to the adjacent mainland, where new houses also begin to appear in the late 8th to early 7th century BC.<sup>98</sup> Likewise, gridded trackways and wider roads facilitating mobility while creating urban plots, along with the establishment of the Fusco cemetery to the northwest, must have been designed primarily to cater for population expansion.<sup>99</sup>

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<sup>94</sup> Graham 1988; Tréziny 2016: 173.

<sup>95</sup> Likewise, Gras 1986: 13; Morakis 2011: 461, 480 (with further references).

<sup>96</sup> Voza 1984-1985: 671; 1999: 9-12; Ciurcina 2000; Basile 2008-2009: 766-780; Zirone 2011: 168; Guzzardi 2012: 166.

<sup>97</sup> Guzzardi 2012: 151, 167; Basile 2008-2009: 781-782. This would still be compatible with an artisanal quarter, as the association is not uncommon (e.g. De Angelis 2016: 84-85).

<sup>98</sup> E.g. Voza 1976-1977: 552-553; Basile 2008-2009: 731-734; 2012: 198.

<sup>99</sup> Plot-like divisions and intersecting trackways are not an entirely new concept in Sicily. They occasionally appear, albeit with different characteristics and on a much smaller scale, in the Sicilian Bronze Age, notably at Thapsos and Ustica, contexts that were probably characterized by unusually dense habitation: Voza 1984-1985: pl. CXXIV; Spatafora 2009: fig. 222.

These changes were no doubt imposed programmatically on an indigenous layout which, by contrast, was the result of organic piecemeal development over a much longer period and ill-suited to cope with rapid urban growth. Nevertheless, some older features and spatial relationships probably endured, dictated by the terrain but perhaps also by tradition: the new cemeteries extended from approximately east to west along the base of the Epipoli heights, where older chamber tombs must still have been visible, possibly flanking or replacing former trackways that also extended around the bay, avoiding the swampy ground.<sup>100</sup> The merging of Ortygia and the adjacent mainland (Acradina and Epipoli) into a single urban area could be regarded as the logical outcome or intensification of a relationship that already existed during the Bronze and Iron Ages.

From a cultural perspective, the more significant changes seem to be represented by new ritual structures around the end of the 8th century BC: notably, the oikos temple and votive pits on Ortygia, and the rock-cut trench graves and sarcophagi of more obviously Greek type in the Fusco cemetery. Knowing so little about indigenous religion and cults makes it hard to detect any enhanced potential for convergence and acceptance of Greek rites. Nevertheless, the variety of Final Bronze to Iron Age burial types amongst local communities in central and eastern Sicily shows remarkable flexibility, encompassing inhumations (crouched or extended) in rock-cut chamber tombs, built masonry chambers, trench graves (fully extended) and storage jars, as well as cremations in jars.<sup>101</sup> Some of these practices seem to have been adapted to specific environments and probably represent local traditions and expedient choices. One cannot assume that they were used in a conscious way by indigenous people to express a broader sense of ethnic affiliation. Likewise, burials in the colonial cemeteries may well have been more concerned with rank and other aspects of social identity than asserting ‘Greekness’.<sup>102</sup>

The conclusion would seem to be that burial forms and accoutrements do not provide incontrovertible proof of either Sikel or Greek identity. At a time when elite status required familiarity with cross-culturally recognisable forms of behaviour and associated materials, however, the onus would have fallen on the locals to adopt and adhere to Greek (and

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<sup>100</sup> For possible pre-Greek roads: Tréziny 2002: 278; Basile 2008-2009: 56.

<sup>101</sup> Albanese Procelli 2003: 56-76 (for a summary).

<sup>102</sup> Shepherd 2011; 2014; 2017a; 2017b. There is still a need for a systematic review and republication of the old excavations in the Syracusan cemeteries.

increasingly international) customs.<sup>103</sup> The conditions must have existed for adaptability and conformity to what were not, in any case, dramatically divergent practices, dictated also by new practicalities. A rapidly expanding metropolitan cemetery might well change from chamber tombs to trench graves which are better suited to flatter open terrain where they can easily be laid out in plots and rows.

#### *Syracusan territorial expansion – the first stage*

The extension of Syracusan control over a wide area beyond the coastal zone exceeds my temporal and geographical remit. Here I propose only a few modifications to some commonly stated ideas concerning relations with nearby indigenous communities in the late 8th century BC. A persistent distribution around the great harbour of small sites that were affiliated or beholden to the larger settlement on Ortygia has been inferred above for the Bronze and Iron Ages. What happened to them in the aftermath of colonization is unclear, although Orsi found evidence of burials dating to the late 8th century BC and later in six of the old chamber tombs at Cozzo Pantano, and others at Plemmyrion.<sup>104</sup> At least this suggests subsequent occupation at these localities, probably due to their persistent relevance within the chora of the city, although a willingness to re-use old and non-Greek tombs could derive from a sense of their ancestral connections, as noted for previous periods (above).

The nearest major indigenous centre that we know of, however, was Cassibile, a commanding site flanking the adjacent Cassibile river with a good view of the coastal plain, including Syracuse, just 14km away (Figures 1 and 5). Yet Cassibile is rarely mentioned in discussion of this period. The Final Bronze Age phase is well documented in the cemeteries, but the Iron Age finds tend to be neglected, even though they include late types of serpentine fibulae and a Late Geometric style painted jug, which suggests contact with early Greek settlers.<sup>105</sup> It is the shortage of Pantalica IV (733-650 BC) finds at Cassibile that points to its decline following the establishment and southward expansion of Syracuse in the late 8th century BC.

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<sup>103</sup> A less pronounced process of cultural entrainment had already occurred in this area during the period of long-distance trade in the Middle-Late Bronze Age. E.g. van Wijngaarden 2002; Leighton 2019b.

<sup>104</sup> C. Pantano: Germanà 2019. Plemmyrion: Orsi 1891: 117; 1899: 28; Scalora 2017: 99.

<sup>105</sup> See: Turco 2000: 97; Pelagatti 1978a; Leighton 2016: 133. The association between the serpentine fibula and plate-stands in tomb CS64 is another indicator that Cassibile style pottery lasted until the arrival of the Greeks, as at Syracuse.

Control of the coastal plain can scarcely have been possible for Syracuse without subjugating or reaching an accord with Cassibile and any other sites, such as Avola antica, crowning the limestone escarpment flanking this area. Cassibile is prominently situated half-way between Syracuse and Helorus, two sites also controlling prominent rivers (the Anapo and the Tellaro respectively) which probably defined large parcels of land. Thucydides does not mention Helorus, but it was undoubtedly under Syracusan control by about 700 BC and acquired characteristic features of a Greek town in subsequent centuries.<sup>106</sup> In the early 7th century BC it had small quadrangular dwellings like those of Syracuse and Megara Hyblaea, and was fortified at least by the mid-6th century BC. That it was established by Syracuse primarily in order to consolidate control over this comparatively well-watered stretch of coastline, which was deemed vital to future growth and security, seems entirely credible.<sup>107</sup> Expansion in this direction would also have avoided confrontation with neighbouring Greeks at Megara, just 18km to the north, and the growing population of Lentini, 30km to the northwest.

Copani has speculated that the first residents of Helorus comprised dispossessed indigenous people from Ortygia and Pantalica, relocated here on the orders of the Syracusan Greeks.<sup>108</sup> While it is possible that indigenous people were amongst the inhabitants of Helorus, it is unlikely that they would have come from Pantalica. Located 24km to the northwest of Syracuse, Pantalica is sometimes presumed to have been destroyed by the Greeks in the late 8th century BC, but this idea is not supported by the presence of materials in several well-endowed tombs of the late 8th and 7th centuries BC.<sup>109</sup> It is also debatable whether the Syracusans would have wanted or been ready to mount a punitive expedition into the tortuous hill country around Pantalica before *c.* 700 BC. All we can tentatively hypothesize is that the population of Pantalica contracted between the late 7th and 5th centuries BC, and then expanded in the 4th century BC.

Nevertheless, a displacement of people between the Anapo and Tellaro rivers as a result of Syracusan expansion is quite possible. The likely decline of Cassibile contrasts with the emergence of other sites further south, most notably Finocchito, located 12km inland

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<sup>106</sup> Voza 1980-1981, 685-686; Copani 2005, with references.

<sup>107</sup> E.g. Di Vita 1956; Copani 2010. Raudino, Tykot and Vianello 2017 also suggest there was a pre-Greek indigenous settlement at Helorus, although no material earlier than the late 8th century BC has been found. See also: Militello 1966: 300-301, fig. 53.

<sup>108</sup> Copani 2005: 257-261.

<sup>109</sup> Leighton 2019a; in press b.

from Helorus, and probably also Noto Antica (Monte Alveria).<sup>110</sup> The evidence from some smaller sites in the area could also be interpreted in terms of population growth or influx, most notably at Avola antica, Cozzo delle Giummare, Murmuro, Castelluccio, and Tremenzano, where some of the old Bronze Age tombs and cemeteries were reused at this time (Figure 2).<sup>111</sup>

Various authors have suggested that Finocchito attracted people from the surrounding area due to regional insecurity caused by Syracusan expansion.<sup>112</sup> This appeals to a reading of Greek and native interaction in terms of hostile relations in this area, which can draw support from the defensive topographical location of Finocchito and its conspicuously fortified entrance. Unlike other major sites in the area, it had no prior history of Late Bronze or even Early Iron Age (initial phase) occupation and evidently flourished for only a short time in the 8th and 7th centuries BC.<sup>113</sup> In the absence of an adjacent river, the location also seems less convenient by comparison with Noto Antica, Cassibile, and Pantalica, which had earlier or longer histories of occupation. Nevertheless, Finocchito was probably able to benefit from the resources of the Hyblaeen plateau and the tributaries of the Tellaro, areas to which Helorus and Syracuse would perhaps not yet have had unfettered access.

In fact, the Finocchito tombs and those of contemporary indigenous sites nearby are by no means impoverished. They contained plentiful locally made pottery, some of it in Greek style, abundant personal ornaments such as bronze or iron fibulae, rings, beads and, somewhat paradoxically, an absence of weaponry (which is typical of local Iron Age tombs). Even if the pottery was mainly locally made, as recent analyses suggest, opportunities for trade and socio-economic interaction probably existed despite any political tensions with the burgeoning coastal cities.<sup>114</sup> Their increasingly territorial ambitions, however, are generally thought to explain the subsequent abandonment of Finocchito concomitant with the establishment of affiliated Greek communities deep inside the indigenous heartland at Akrai and Kasmenai *c.* 664 and *c.* 644 BC (following the chronology of Thucydides VI.5.2-3). The

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<sup>110</sup> Steures 1980; Frasca 1981 (with further references). For Noto: La Rosa 1971.

<sup>111</sup> Leighton 2016: 144 (with further references to these sites).

<sup>112</sup> La Rosa 1971: 77; Frasca 1981: 93; Copani 2005: 260.

<sup>113</sup> The initial date of occupation of Finocchito is controversial: *c.* 850-800 BC according to Frasca 1981, and *c.* 750 BC according to Steures 1988. I am inclined to agree with Steures, since: a) the small number of tombs suggests that the earlier phase was shorter than the second; b) considerable population growth seems to have occurred only after contact with Greek settlers; c) none of the finds necessarily date long before their arrival (in my opinion).

<sup>114</sup> Raudino 2018 (for ceramic analyses and the suggestion of knowledge exchange).



reasons for the establishment of Akrai and Kasmenai, however, may not necessarily have been solely or even primarily concerned with the subjugation of indigenous people.<sup>115</sup>

### *Conclusions*

The main conclusions and hypotheses that derive from this survey may be briefly summarized as follows. During the Neolithic (*c.* 6000 to 3500 BC), the configuration and resources of the Syracusan coastal zone attracted settlements of early agriculturalists, although there is no reason to believe that the area of the modern town and harbour were especially favoured. Apart from the ‘ditched villages’, most settlements at this time were probably small and scattered along shorelines and on raised rocky ground and promontories with fresh water sources nearby. A contraction or shift in occupation probably followed during the Copper Age (*c.* 3500 to *c.* 2300 BC) when fewer finds or sites are known, excepting various caves.

More substantial evidence for the Early Bronze Age (Castelluccio and later material) comes from rocky elevated localities around the bay, possibly dating from *c.* 2200 BC, which set the pattern for future occupation. By the 17th-16th centuries BC, the summit of Ortygia hosted a settlement which probably continued into the Middle Bronze Age (Thapsos period, 15th-13th centuries BC). The growing importance of the great harbour is indicated by a series of sites (notably Plemmyrion, Matrensa-Milocca, Cozzo Pantano and Epipoli) known mainly from burials in rock-cut chamber tombs. Imported goods, including Mycenaean pottery, emphasize their interconnected nature and involvement in maritime trade, which is a conspicuous feature of the Sicilian Middle Bronze Age.

While population might have contracted during the first phase of the Late Bronze Age (*c.* 1250-1050 BC), some of the older Bronze Age sites around the great harbour were still occupied at this time. Ortygia probably encompassed over 100 hectares, as opposed to *c.* 60 today, due to sea-level change. Centred on the high ground (around Piazza Duomo), the Final Bronze to Early Iron Age settlement (*c.* 1050-733 BC) comprised elongated and often large, rather than small and circular, dwellings, probably spread over several hectares. Sub-groups of a more extended community may also have resided on the adjacent mainland in the area of the later city. According to a model of multiple autonomous centres with subsidiary sites in their vicinity, Ortygia would have been an important, or at least middle-ranking, settlement controlling the bay area and probably also a wider surrounding territory bordering that of

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<sup>115</sup> Frasca 1981: 69; 2015a: 86-88; Copani 2009, with references; Shepherd 2017a: 341.

Cassibile. The coastal zone of southeast Sicily was not semi-deserted or abandoned in the immediate pre-Greek period, although the main sites were in a few topographically prominent and favourable locations.

The archaeological contexts identifiable with the first Greek settlers are not easily isolated and not fully published, but evidence of a destruction event marking the end of the pre-Greek settlement is lacking. Even if one accepts the statement of Thucydides mentioning the expulsion of indigenous people from Ortygia, it is not clear whether they quit the entire site or remained within a wider catchment. The ethnic identity of individuals in the burials cannot be objectively ascertained, but a few tombs contain artefacts of local type, and the quantity of indigenous pottery and metal items associated with early Greek wares in residential zones may have been underestimated. Although hard to specify, some degree of cultural interaction is implied, perhaps through cohabitation and mixing. There may have been a transitional phase at Syracuse, not unlike that recently identified at Naxos, prior to the more striking changes imposed on the settlement layout towards the end of the 8th and in the early 7th century BC. The latter involved urban zoning and the development of new quarters and activity areas, well represented by the *oikos* temple and cult activities on the summit of Ortygia, and by cemeteries, which attest new rituals and funerary practices. The preference for relatively small quadrangular structures, whether for cult or domestic use, flanked by extensive rectilinear trackways was triggered by population growth, which necessitated expansion of the settlement and its burial grounds on the adjacent mainland. A close relationship between these areas and their use as habitation and burial zones, however, already existed in the pre-Greek period.

The initial extension of Syracusan control over the adjacent territory, which proceeded southward along the coastal plain, disrupted pre-existing power relations and settlement patterns. The most directly affected site would have been Cassibile, which was probably marginalized or subjugated prior to or in conjunction with the establishment of Helorus. Other indigenous settlements in the surrounding territory, which were perhaps too small or distant to constitute a serious obstacle or immediate threat to Syracuse or Helorus, evidently maintained trading links with these two increasingly powerful coastal centres. With little or no prior history of occupation, Finocchito grew rapidly in size during the late 8th and early 7th century BC but was soon abandoned, whereas Pantalica must have lost its former power and influence in the 7th century BC but probably survived and certainly re-emerged in later periods (Hellenistic–Byzantine), albeit with greatly diminished status.

While the arrival of Greek settlers initiated the transformation of Syracuse into a western Greek city, the Thucydidean idea of its foundation has tended to exclude or minimize any meaningful connection with earlier periods of occupation. From a longer-term perspective, however, the emergence and expansion of Syracuse as a major centre of regional significance, which began in the Final Bronze and Iron Ages, if not earlier, could be said to have resumed in the 8th century BC, albeit in an unprecedentedly rapid and radical manner.

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Figure 1: Regional map with main site locations mentioned in the text (the author).

Figure 2: Syracuse and environs with prehistoric sites and find spots. Key: 1 Stentinello, 2 Picci tomb, 3 Picci 1 cave, 4 Ballarella, 5 Podere Reale, 6 Santa Panagia, 7 Sinerchia, 8 Via Bulgaria, 9 Balza Acradina, 10 Villa Reimann, 11 Fusco Portella, 12 Hieron altar tomb, 13 Via Orsi tomb, 14 Via Carabelli, 15 Piazzale Stazione, 16 Ginnasio Romano, 17 Piazza Marconi, 18 Via Bengasi, 19 Ortygia temple of Apollo, 20 Ortygia Piazza Duomo area, 21 Ortygia Castello Maniace, 22 Cozzo Pantano, 23 Matrensa-Milocca, 24 Plemmyrion settlement 24a Plemmyrion tombs, 25 Plemmyrion Mondjo-Torretta tombs, 26 Terrauzza, possible EBA tombs, 27 Giaracà Neolithic site, 28 Capo Murro di Porco tombs. (Based on the Carta Tecnica Regionale 1:10,000 sheets (2014 ed), and bibliography cited in text).

Figure 3: Principal archaeological contexts on the high ground of Ortygia (Piazza Duomo and environs) from the Early Bronze Age to the early colonial period mentioned in the text. (Adapted mainly from: Carta Tecnica Regionale 1:10,000 series (2014 ed); Orsi 1918; Voza 1999; Basile 2008-2009; Guzzardi 2012).

Figure 4: Finds and plans from Orsi's excavations around Via Minerva: a-f) small bronze dress items; g) plumed ware jars; h) amber beads; i) ceramic theriomorph; j) bronze spearhead; k-l) geometric painted ware; m) plumed ware bowls; n) house wall plan. (Adapted from Orsi 1918, figs. 165, 164, 166, 169, 167, 168, 95, 177, 108, 163, 98, 97, 96 and tav. I).

Figure 5: the main hill-top of Cassibile (foreground) looking northwards across the coastal plain, with arrows indicating (from left to right) the locations of Ortygia, Plemmyrion (southern end) and Ognina.